

# SERIES IV

SOURCE DATA CAPTURE ■ DATA TRANSMISSION ■ DATA CONVERSION



MODEL IV-T-401 DATA TRANSMITTER

## GENERAL DESCRIPTION

SERIES IV Data Transmission system is designed to provide communications terminal for 1/4" magnetic tape cartridges produced on any SERIES IV Data Recorder.

### MODEL IV-T-401 SPECIFICATIONS

Input:—1/4 inch magnetic tape in cartridge from SERIES IV Data Recorder

Output:—Communications interface for 400 Series Data Phone Model 402C2.

Coding:—Input cartridges—BCD with even parity, packed 16 characters per inch.

Operation:—Completely unattended—Basic control functions (Start, Stop, Rewind) are automatically executed upon command of the Receiver via the Data Phone interface.

#### Transmission

Rate:—60 Characters per second.

Accuracy:—No more than one undetected error in 1,000,000 characters.

Power:—115 volts, 60 cycles.

Loading:—Error proof cartridge loading.

Size:—14" x 14" x 8"—27 pounds.

#### Receiving Terminal:

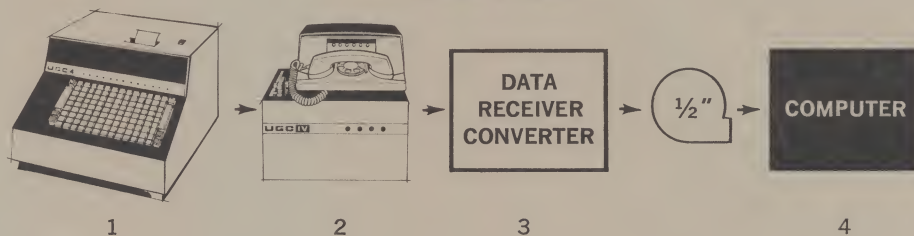
UGC Instruments off-line Receiver/Converter (Model IV-C-201) provides receiving terminal and Data Phone interface. Output of Receiver/Converter is 1/2" IBM compatible magnetic tape, 556 bpi. DATAspeed receivers may also be used or Transmitter may be auto-poled directly from computer through a communications interface such as the IBM 2701, GE DATANET 30, etc.

## Systems Capability

SERIES IV provides complete systems and hardware capability to capture data at the source on convenient, low cost magnetic recorders... to transmit via communications lines (or mails)... and to convert off-line to computer compatible 1/2" magnetic tape.

The system eliminates key punching and cumbersome paper tape operations **and** offers all the advantages of magnetic tape. Reliability is built-in through a variety of data validation techniques. A wide array of optional features allows you to tailor hardware to application requirements. SERIES IV fills the long-recognized need for fast, accurate source data acquisition, the end product of which is input at computer tape drive speeds.

### Data Flow



1. Data captured at source on digital recorder. Output is 1/4" magnetic tape cartridge.

2. Data transmitted on SERIES IV communications link.

3. SERIES IV receiver/converter units write 1/2" tape from input of either Dataphone or 1/4" cartridges.

4. 1/2" tape is read on computer tape drive.



## UGC INSTRUMENTS

A Subsidiary of United Gas Corporation

5610 Parkersburg Drive

P. O. Box 36404

Houston, Texas 77036

Phone: 713 / SU 2-3030



## SODA—Source Oriented Data Acquisition

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Comments: \_\_\_\_\_

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**Thank you**

. . . for your request for additional information on our products.

We're enclosing literature on the equipment you requested.

For further information, or to remain on our mailing list, simply fill out and return the attached reply card.

Again—thank you for your interest and please let us know if we can be of any service whatsoever.

Sincerely,

H. N. McNEILL

# SERIES IV

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## IV-R-200 FULL BANK DATA RECORDER

writes hard copy and Magnetic Tape

## GENERAL DESCRIPTION

IV-R-200 is a Digital Magnetic Recorder designed to capture data directly on  $\frac{1}{4}$ " magnetic tape at source location. Output tapes are converted to IBM 556 BPI  $\frac{1}{2}$ " tape on SERIES IV Receiver/Converter.

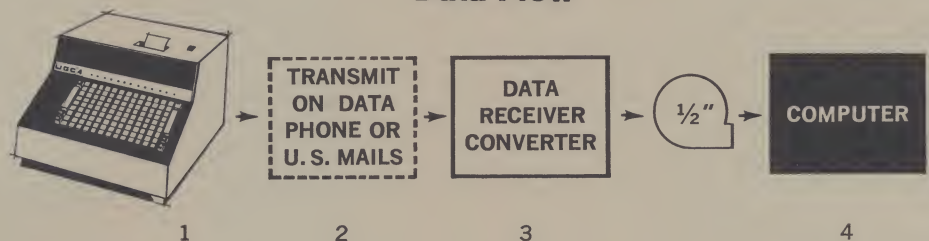
- |  |   |
|--|---|
| <p>Data Entry:—Manual by keystroke</p> <p>Function Keys:—Void Key<br/>—End of File</p> <p>Keyboard Clearing:—Automatic Clear after Recording<br/>—Manual Clear Key</p> <p>Output:—Five Channel <math>\frac{1}{4}</math>" Magnetic Tape Cartridge</p> <p>Coding:—BCD with even parity, packed 16 characters per inch</p> <p>Record Format:—Fixed word length. End of word is discreet wordmark character programmatically recognizable. Motor bar functions are discreet characters.</p> <p>Power Requirement:—110 V AC, 60 cps</p> <p>Hard Copy Output:—Standard adding machine listing format. Alpha characters available.</p> <p>Magnetic Tape:—Reuseable 400 foot cartridge, computer tape quality oxide binder. Error proof loading.</p> | <p>Data Check:—Record Quality Assurance circuitry validates each character entered.</p> <p>Automatic Machine Lock-Up:—In the event of End of Tape, Recorder Power Failure, Broken Tape, or Invalid character write determined by Record Quality Assurance Circuitry</p> <p>Optional Features:—Choice of keyboard field, from 3 to 13 columns<br/>—Selective column clear after recording<br/>—Supervisory keyboard enforcing<br/>—Zero suppression on printer<br/>—Self-contained power for semi-portable operation<br/>—Upper and Lower Accumulator<br/>—Upper Accumulator Window Display<br/>—Accumulation by selected field<br/>—Motorized columns in data field</p> |
|--|---|

## Systems Capability

SERIES IV provides complete systems and hardware capability to capture data at the source on convenient, low cost magnetic recorders... to transmit via communications lines (or mails)... and to convert off-line to computer compatible  $\frac{1}{2}$ " magnetic tape.

The system eliminates key punching and cumbersome paper tape operations **and** offers all the advantages of magnetic tape. Reliability is built-in through a variety of data validation techniques. A wide array of optional features allows you to tailor hardware to application requirements. SERIES IV fills the long-recognized need for fast, accurate source data acquisition, the end product of which is input at computer tape drive speeds.

### Data Flow



1. Data captured at source on digital recorder. Output is  $\frac{1}{4}$ " magnetic tape cartridge.
2. Data transmitted on SERIES IV communications link.
3. SERIES IV receiver/converter units write  $\frac{1}{2}$ " tape from input of either Dataphone or  $\frac{1}{4}$ " cartridges.
4.  $\frac{1}{2}$ " tape is read on computer tape drive.

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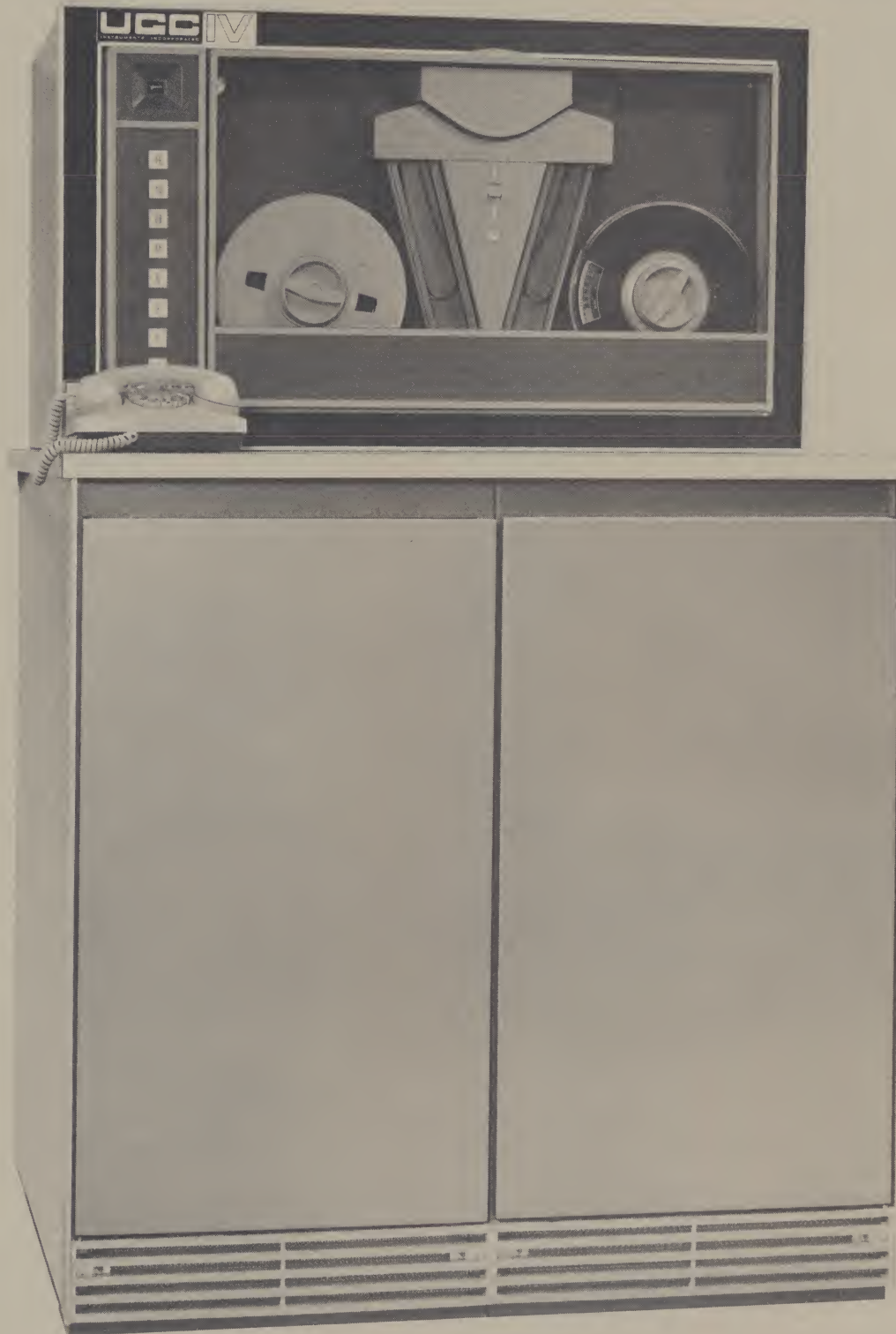
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# SERIES IV

SOURCE DATA CAPTURE ■ DATA TRANSMISSION ■ DATA CONVERSION



**MODEL IV-C-201 DATA RECEIVER / CONVERTER**  
writes IBM compatible 1/2" magnetic tape



## SERIES IV OFF-LINE DATA RECEIVER-CONVERTER

### GENERAL DESCRIPTION:

Model IV-C-201 Receiver-Converter is free standing tape unit designed to execute two functions: (1) Convert SERIES IV 1/4 inch magnetic tape cartridges to 1/2 inch IBM compatible tape; (2) Convert Dataphone output to 1/2 inch IBM compatible tape.

Hardware consists of two 1/4 inch tape decks, one 1/2 inch tape deck, two 256-character buffers, Dataphone receiver interface, operator console, and power supply, all in single unit.

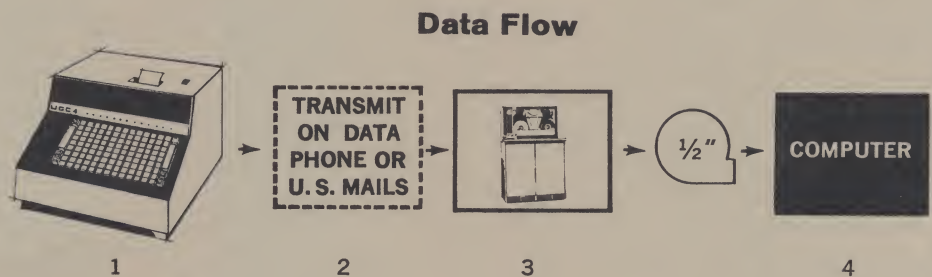
Input:—1/4 inch magnetic tape cartridge;  
or data received on Dataphone.  
Output:—IBM compatible, seven channel  
1/2-inch magnetic tape, packed 556  
bpi.  
Blocking:—256 characters.  
Validity Check:—Parity check on input data and on  
buffer transfer, true read after  
write check after 1/2 inch tape  
write.  
Parity Check:—Parity error detected in input data  
automatically writes "Flag Char-  
acter" on 1/2 inch tape. Automatic  
error count.

Lock Up Feature:—Automatic lock-up after two suc-  
cessive write failures in single  
block. Manual clear reactivates.  
Correction Feature:—Following write failure, tape auto-  
matically advances to clean tape  
position for second write.  
Start Time:—Five ms, bi-directional  
Stop Time:—One ms, bi-directional  
Rewind:—Less than 3 minutes, 10 1/2 inch  
reel  
Components:—All solid-state  
Electrical  
Requirement:—110 Volt/AC, 60 cps  
Inter-Record Gap:—3/4 inch

### Systems Capability

SERIES IV provides complete systems and hardware capability to capture data at the source on convenient, low cost magnetic recorders... to transmit via communications lines (or mails)... and to convert off-line to computer compatible 1/2" magnetic tape.

The system eliminates key punching and cumbersome paper tape operations **and** offers all the advantages of magnetic tape. Reliability is built-in through a variety of data validation techniques. A wide array of optional features allows you to tailor hardware to application requirements. SERIES IV fills the long-recognized need for fast, accurate source data acquisition, the end product of which is input at computer tape drive speeds.



1. Data captured at source on digital recorder. Output is 1/4" magnetic tape cartridge.
2. Data transmitted on SERIES IV communications link.
3. SERIES IV receiver/converter units write 1/2" tape from input of either Dataphone or 1/4" cartridges.
4. 1/2" tape is read on computer tape drive.

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**MODEL IV-R-400 PORTABLE DIGITAL ALPHANUMERIC MAGNETIC RECORDER**

optional hard copy print-out available



## GENERAL DESCRIPTION

IV-R-400 is a Portable Digital Magnetic Recorder designed to capture alpha **and** numeric data at source location. Output of the recorder is 1/4" magnetic tape cartridge which is converted to IBM compatible 556 BPI 1/2" Magnetic Tape on SERIES IV Receiver/Converter.

## PRELIMINARY SPECIFICATIONS

Data Entry:—Manual, by key depression, standard 10-key adding machine arrangement.

—Alpha characters are encoded by two successive key strokes

Output:—Five Channel 1/4" magnetic tape cartridge (Model shown is reel mounted 1/4" tape)

Coding:—BCD with even parity, packed 16 characters per inch

Weight:—3 pounds approximately

Size:—8 1/2" x 5" x 2 1/2"

Power:—Recording Power—Battery

—Mechanical Power—Self-Contained

Record Format:—Variable length word. "End of Word" is discreet wordmark character programmatically recognizable.

Tape Capacity:—20,000 character positions per cartridge

Hard Copy Output:—Serial Printout (Alpha and Numeric characters. Print unit not illustrated)

Environmental—All electronic components protected from moisture and dust. Operational up to 120°F.

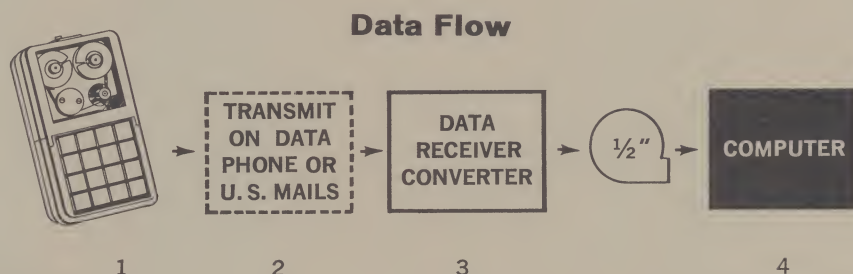
Magnetic Tape:—Reuseable cartridge, computer tape quality oxide binder. Error-proof loading.

Data Check—Record Quality Assurance Circuitry.

## Systems Capability

SERIES IV provides complete systems and hardware capability to capture data at the source on convenient, low cost magnetic recorders... to transmit via communications lines (or mails)... and to convert off-line to computer compatible 1/2" magnetic tape.

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